

Application No.: 10/562,792

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A phosphor element comprising:
a pair of electrodes facing each other; and
a phosphor layer interposed between the pair of electrodes and including a semi-conductive phosphor fine particle in which at least a part of a surface is covered with a conductive organic material, wherein the conductive organic material is chemically adsorbed on the surface of the semi-conductive phosphor fine particle.
2. (Cancelled)
3. (Previously presented) The phosphor element according to claim 1, wherein the semi-conductive phosphor fine particle has a particle diameter of 1 μm or less.
4. (Previously presented) The phosphor element according to claim 1, wherein the semi-conductive phosphor fine particle includes oxide or composite oxide including at least one element selected from the group consisting of Zn, Ga, In, Sn and Ti.
5. (Previously presented) The phosphor element according to claim 1, wherein the phosphor layer is so configured that the semi-conductive phosphor fine particles are dispersed in a transparent conductive matrix.
6. (Previously presented) The phosphor element according to claim 1, further comprising an electron transport layer between the phosphor layer and at least one of the electrodes.
7. (Previously presented) The phosphor element according to claim 1, further comprising a thin film transistor connected with at least one of the pair of electrodes.

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8. (Currently amended) A display device comprising:

a luminescent array in which phosphor elements are arranged in ~~two dimensions~~ a plane,
wherein the phosphor element comprises:

a pair of electrodes facing each other;

a phosphor layer interposed between the pair of electrodes and including a semi-conductive phosphor fine particle in which at least a part of a surface is covered with a conductive organic material; and

a thin film transistor connected with at least one of the pair of electrodes;

a plurality of x electrodes, in parallel with each other, extending in a first direction in parallel with a face of the luminescent array; and

a plurality of y electrodes extending in parallel with a second direction, orthogonal to the first direction, in parallel with the face of the luminescent array, wherein a thin film transistor of the luminescent array is connected with the x electrode and the y electrode, respectively.